

ORDERING AND PROVISIONING

● RESALE

INTERFACE

AVAILABLE

- A FRONT END ELECTRONIC INTERFACE WILL BE AVAILABLE TO CLECs FOR CONVERSION OF RESIDENTIAL AND MOST BUSINESS ORDER REQUESTS (UP TO 30 LINES). SAME FRONT END SYSTEM SWBT USES FOR ITS RETAIL CUSTOMERS NOW
- AS THE FRONT END SYSTEM IS ENHANCED TO SUPPORT SWBT BUSINESS RETAIL COMPLEX SERVICES, SWBT WILL MAKE THOSE CAPABILITIES AVAILABLE TO THE CLECs AS NEGOTIATED

ORDERING AND PROVISIONING

● RESALE

INTERFACE

AVAILABLE

- IN THE INTERIM, COMPLEX REQUESTS WOULD BE ENTERED INTO SWBT'S SERVICE ORDER SYSTEM DIRECTLY BY SWBT PERSONNEL IN THE SAME TIME FRAME AND MANNER AS SWBT ENTERS ITS OWN COMPLEX BUSINESS RETAIL ORDERS. UPON REQUEST, SWBT WILL MAKE ITS SERVICE ORDER SYSTEM AVAILABLE TO CLECs NOW
- AN ELECTRONIC INTERFACE IS AVAILABLE TO CLECs FOR CHECKING THE STATUS OF SERVICE ORDERS NOW
- FOR CLECs WHO PREFER AN ELECTRONIC DATA INTERCHANGE (EDI) INTERFACE, SWBT IS MAKING EDI AVAILABLE FOR CONVERSION, NEW CONNECTS, DISCONNECT AND SUSPEND ORDER REQUESTS NOW

ORDERING AND PROVISIONING

● RESALE

INTERFACE

AVAILABLE

- NATIONAL REQUIREMENTS FOR AN EDI INTERFACE AS NEGOTIATED
CAPABILITY FOR DIRECTORY LISTINGS, CHANGE OF SERVICE,
PARTIAL MIGRATIONS, AND COMPLEX CONVERSIONS ARE BEING
ESTABLISHED. SCHEDULES TO BEGIN TESTING THESE FUNCTIONS
ARE BEING FORMULATED
- ALTHOUGH NATIONAL STANDARDS HAVE YET TO BE AS NEGOTIATED
CREATED, SWBT IS DEVELOPING AN EDI FORMATTED
INTERFACE TO ENABLE CLECs TO ELECTRONICALLY TRANSMIT
COMPLEX BUSINESS ORDER REQUESTS TO SWBT FOR
PROCESSING.

ORDERING AND PROVISIONING

● **UNBUNDLED NETWORK ELEMENTS (UNE)**

- » ELECTRONIC ORDERING REQUIREMENTS HAVE YET TO BE FULLY COMPLETED BY ANY NATIONAL STANDARD BODY
- » SWBT IS DEVELOPING AN EDI INTERFACE TO RECEIVE AND PROCESS CLEC REQUESTS FOR UNEs
- » THE INITIAL EDI CAPABILITY WILL SUPPORT CLEC REQUESTS FOR THE FOLLOWING UNEs AS DEFINED BY THE ORDERING AND BILLING FORUM (OBF) AND EDI COMMITTEE AS OF AUGUST 1996:
 - UNBUNDLED LOOPS
 - INTERIM NUMBER PORTABILITY
 - UNBUNDLED SWITCH PORTS
- » IN ADDITION, THE INITIAL EDI CAPABILITY WILL ALSO SUPPORT OTHER UNEs AS ORDERED / NEGOTIATED ALREADY

ORDERING AND PROVISIONING

UNBUNDLED NETWORK ELEMENTS

SWBT WILL MAKE AVAILABLE TO CLECs THE FOLLOWING
CAPABILITIES FOR UNBUNDLED NETWORK ELEMENTS:

INTERFACE

AVAILABLE

- PROCESS EDI FORMATTED FILES ELECTRONICALLY
BASED ON AFOREMENTIONED AUGUST 1996 OBF DEFINITIONS AS NEGOTIATED
- AN ELECTRONIC APPLICATION IS BEING DEVELOPED FOR
CLECs THAT DO NOT HAVE EDI GENERATION CAPABILITIES.
THIS INTERFACE WILL ENABLE CLECs TO CREATE AND SEND
ORDER REQUESTS TO SWBT ELECTRONICALLY. AS NEGOTIATED
- AN ELECTRONIC INTERFACE IS AVAILABLE TO CLECs FOR
CHECKING THE STATUS OF SERVICE ORDERS NOW

MAINTENANCE / REPAIR

- A CHOICE OF TWO ELECTRONIC INTERFACES ARE **AVAILABLE TODAY** FOR CLECs TO SUBMIT AND CHECK THE STATUS OF TROUBLE REPORTS FOR EITHER **RESALE OR UNBUNDLED NETWORK ELEMENTS**:
 - CLECs CAN ACCESS ONE INTERFACE VIA DIAL-UP OR PRIVATE LINE
 - » INTERFACE PROVIDES THE CAPABILITY TO INITIATE A MECHANIZED LOOP TEST FOR RESOLD POTS.
 - » INTERFACE PROVIDES MAINTENANCE HISTORY CAPABILITY FOR RESOLD POTS
 - THE OTHER ELECTRONIC INTERFACE IS A NATIONAL STANDARDIZED ELECTRONIC BONDING INTERFACE UTILIZED TODAY BY IXCs

BILLING

- ELECTRONIC INTERFACE AVAILABLE TODAY FOR **RESALE** CLECs TO RECEIVE BILLING INFORMATION VIA EDI FORMAT
- ELECTRONIC BILL FORMAT FOR **UNBUNDLED NETWORK ELEMENTS** IS AVAILABLE TODAY THROUGH SWBT CARRIER ACCESS BILLING SYSTEM (CABS) AS NEGOTIATED

BILLING

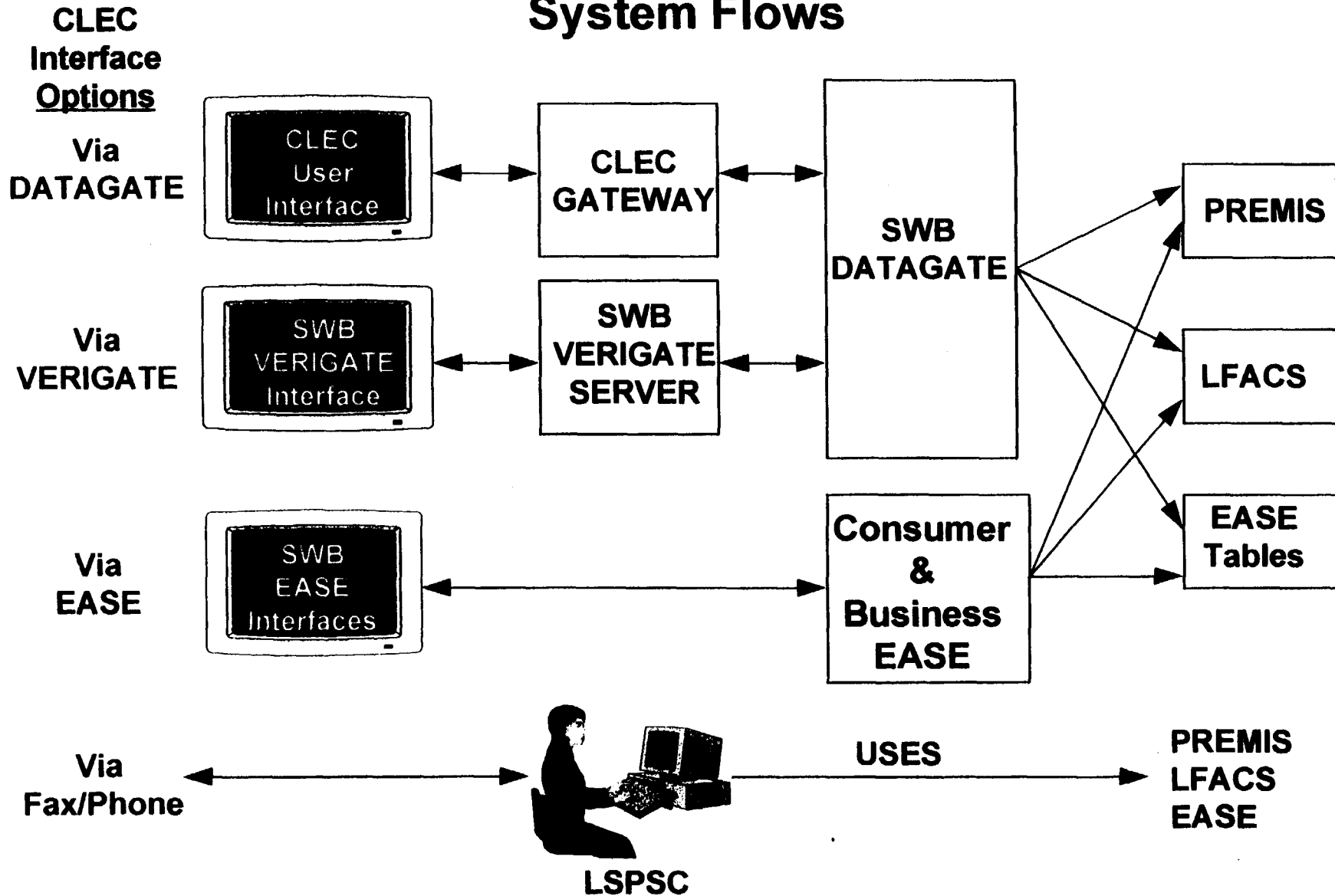
- **ELECTRONIC INTERFACE IS AVAILABLE TODAY TO CLECs FOR VIEWING BILLING INFORMATION OF RESALE OR UNBUNDLED NETWORK ELEMENTS**
- **ELECTRONIC DAILY FEED FOR USAGE / TOLL BILLABLE RECORDS IS AVAILABLE TODAY TO CLECs VIA NATIONAL STANDARD EXCHANGE MESSAGE RECORD (EMR) FORMAT**

SWBT OPERATIONS SUPPORT INTERFACES

● SUMMARY

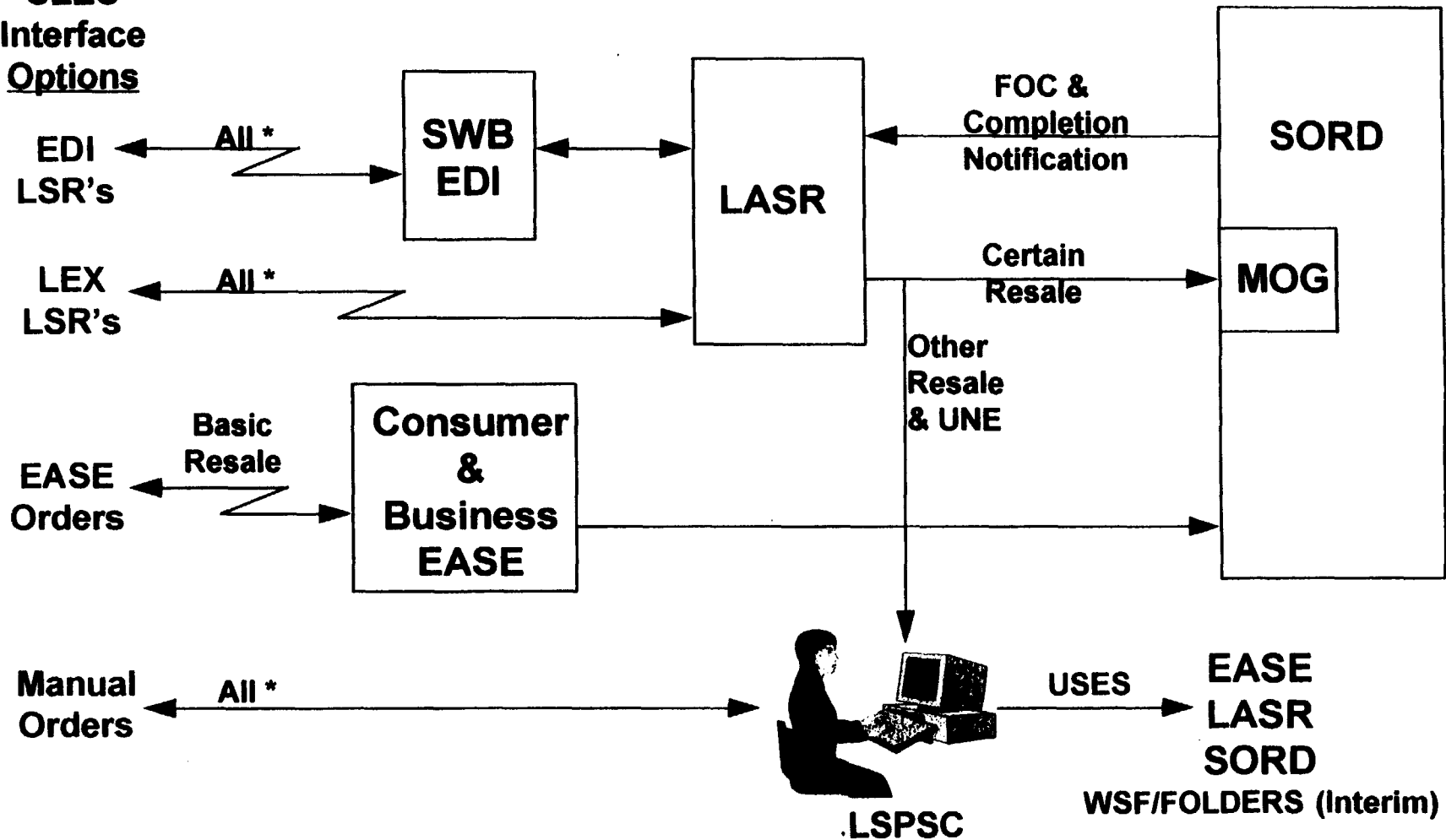
- » SWBT HAS PROVIDED CLECs THE CAPABILITY TO ACCESS ITS OPERATIONAL SUPPORT SYSTEM FUNCTIONS IN A MANNER THAT WILL MEET AND OFTEN EXCEED THE NEEDS OF CLECs
- » SWBT WILL PROVIDE SUBSTANTIALLY THE SAME FUNCTIONALITY TO CLECs FOR PRE-ORDERING, ORDERING, PROVISIONING, MAINTENANCE/REPAIR AND BILLING THAT SWBT PROVIDES ITS RETAIL CUSTOMERS
- » AS NATIONAL INDUSTRY INTERFACE STANDARDS ARE DEFINED AND APPROVED, SWBT WILL CONTINUE TO INCORPORATE THOSE STANDARDS INTO ITS OPERATIONS SUPPORT INTERFACES WITH CLECs

CLEC Pre-Ordering Options System Flows



CLEC Ordering Options System Flows

CLEC Interface Options



* NOTE: Denotes all types of orders Resale & UNE

Southwestern Bell Telephone Access to Operations Support Systems Functions

Electronic
Access
Methods

Remote Access
Facility (RAF)
(Secured Connectivity)

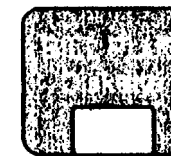
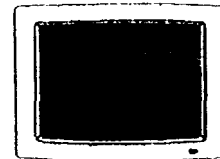
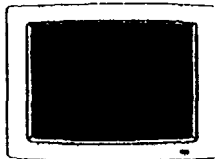
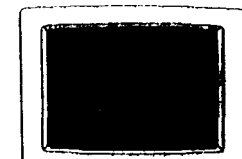
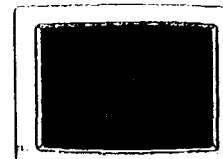
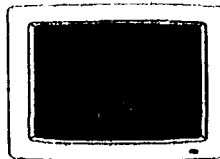
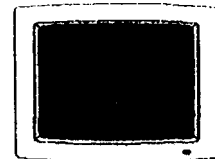
Pre-ordering

Ordering

Billing

Repair/Maintenance

SWBT Customer Service Interfaces



Via:

Dial-up
(Modem)

Negotiated Interfaces in Advance of Industry Standards

DATA GATE
Query System

EDI* (OBF-LSR)
Resale / UNE

EDI* CRIS-Resale
CABS-UNE

And / Or

Direct
Connection

Industry Standardized Interfaces

UNIX* (OBF-ASR)
Interconnection



EMR* (Exchange
Message Record)

EB* (Electronic
Bonding T1M1)

* Access via RAF is not required for secured interfaces.

Manual Access to Functions



Via Phone

and / or



Via Fax

RAF Help Desk

LSP Service Center

LSP Service Center

LSP Service Center

LSP Repair Center

ATTACHMENT B

SUMMARY OF SWBT ELECTRONIC INTERFACES

**INCLUDES PHYSICAL INTERFACE,
HARDWARE / SOFTWARE
REQUIREMENTS AND HOURS OF
OPERATION FOR EACH APPLICATION**

Requirements for Access to Southwestern Bell OSS Functions
3/28/97

Attachment B

System/Function	Access via Remote Access Facility	Hardware Requirements	Software Requirements	Hours of Operation (Monday thru Friday) **	Hours of Operation (Saturday) **	Hours of Operation (Sunday) **
PRE-ORDERING:						
DataGate (Resale and UNE)	Yes	Personal Computer, UNIX, Tandem, MVS	PC OS - OS/2, Windows 3.11, Win 95, Win NT, Winsock 1.1 compliant TCP package; UNIX OS - Pyramid, HP, AIX, Sun Solaris, TCP; Tandem Guardian OS, TCP; DataGate client distribution for appropriate platform	7:00am - midnight	7:00am - 11:00pm	10:00am - 11:00pm
Verigate (Resale and UNE)	Yes	Personal Computer (486 or above); Modem (14.4 bps or above)	DOS (Version 5.0 or above); Windows 3.1, 3.11, Windows 95, Windows using OS/2; WINSOCK compliant TCP package (e.g., Microsoft TCP stack) (if private line circuit is used)	6:00am - 10:00pm	7:00am - 6:00pm (except for Channel Inquiry)	none
EASE (Residence Resale)	Yes	3270 terminal for private line connection, or for dial-up connections, a Personal Computer with 3270 terminal emulation network connectivity to SWB's network	TN 3270 terminal emulation software, TCP/IP	7:00am - midnight	7:00am - 11:00pm	10:00am - 11:00pm
EASE (Business Resale)	Yes	Personal Computer (Pentium); Modem (28.8 bps or above)	SWB application software running over OS/2 operating system, TCP/IP	7:00am - midnight	7:00am - 11:00pm	10:00am - 11:00pm
ORDERING/PROVISIONING:						
EASE (Residence Resale)		(See previous information)				
EASE (Business Resale)		(See previous information)				
EDI Ordering Gateway (Resale and UNE)	Not required but could be used	Modem / line	Communications Software, i.e., frame relay. EDI translation package, i.e., GENTRAN. EDI transaction types supported: 850, 860, 855, 865, 997.	7 x 24	7 x 24	9:00am - midnight
LEX (Resale and UNE)	Yes	Personal Computer (486 or above); Modem (14.4 bps or above)	DOS (Version 5.0 or above); Windows 3.1, 3.11, Windows 95, Windows using OS/2; WINSOCK compliant TCP package (e.g., Microsoft TCP stack) (if private line circuit is used)	(Planned) 7:00am - 8:00pm	(Planned) 7:00am - 8:00pm	(Planned) 9:00am - 6:00pm
Southwestern Bell Toolbar / Order Status (Resale and UNE)	Yes	Personal Computer (486 or above); Modem (14.4 bps or above)	DOS (Version 5.0 or above); Windows 3.1, 3.11, Windows 95, Windows using OS/2; WINSOCK compliant TCP package (e.g., Microsoft TCP stack) (if private line circuit is used)	6:00am - 11:30pm	7:00am - 6:00pm	none

Requirements for Access to Southwestern Bell OSS Functions
3/28/97

Attachment B

System/Function	Access via Remote Access Facility	Hardware Requirements	Software Requirements	Hours of Operation (Monday thru Friday) **	Hours of Operation (Saturday) **	Hours of Operation (Sunday) **
REPAIR AND MAINTENANCE:						
Southwestern Bell Toolbar / Trouble Administration	Yes	Personal Computer (486 or above); Modem (14.4 bps or above)	DOS (Version 5.0 or above); Windows 3.1, 3.11, Windows 95, Windows using OS/2; WINSOCK compliant TCP package (e.g., Microsoft TCP stack) (if private line circuit is used)	4:00am - 10:00pm	5:00am - 9:00pm	5:00am - 9:00pm
Electronic Bonding Interface	No	Mid-range Server (for EB gateway)	UNIX operating system; CMIP protocol; LSP's build software interface between their OSSs and the CMIP protocol which adheres to the Open Systems Interconnect (OSI) data communications standards and the ANSI T1M1, T1M1.5, T1.227 and T1.228 standards	3:00am - midnight	3:00am - 10:00pm	4:30am - midnight
BILLING:						
Customer Network Administration / Billing Inquiry (Resale and UNE)	Yes	Personal Computer (486 or above); Modem (14.4 bps or above)	DOS (Version 5.0 or above); Windows 3.1, 3.11, Windows 95, Windows using OS/2; WINSOCK compliant TCP package (e.g., Microsoft TCP stack) (if private line circuit is used)	7:00am - midnight	7:00am - 11:00pm	10:00am - 11:00pm
Bill Plus (sm) (Resale)	No	Personal Computer ranging from a System 486, Memory 8MB, CD-ROM 2X to a Pentium 144 MHz, Memory 32MB, CD-ROM 6X. Size depends on volume of calls per month and amount of Account Service Information that will be received.	Windows 3.1 or better, VGA monitor, MB disk space, Microsoft compatible mouse.	Per Bill Period		
Usage Extract Feed (Resale and UNE)	No	EBCDIC compatible. Based on selected transmission: 9TRK - 9 TRK Tape Drive, 18TRK - 18TRK Tape Drive, Direct:connect - private circuit, TCP/IP - Internet or RAS access	Direct:Connect option requires Direct:Connect software, TCP/IP option needs TCP/IP Communications Software, i.e., frame relay. EDI translation package, i.e., GENTRAN. EDI transaction types supported: 811, 864, 997.	Daily Feed		
Electronic Data Interchange Billing (EDIB) (Resale and UNE)	No	Modem / line		Per Bill Period		

** Hours of operation listed are generally the same as SWBT provides to itself and are subject to change or consideration as business needs dictate.

ATTACHMENT C

SWBT DEMONSTRATIONS OF ELECTRONIC INTERFACES

ATTACHMENT C

April 1997

SWBT ELECTRONIC INTERFACES DEMONSTRATIONS

In an effort to provide clear understanding of the functions associated with access to our operations support systems, SWBT provides live demonstrations of system applications. To date, we have performed the following demonstrations.

CLEC NAME	DATE OF DEMO	FUNCTION/ APPLICATION
ALTEL	MARCH 1997	ALL
AT&T	JANUARY 1997	ORDERING/BUS & RES EASE
AT&T	MARCH 1997	TROUBLE ADMINISTRATION
CAPROCK	MARCH 1997	ALL
E Z TALK	NOVEMBER 1996	ORDERING/BUS & RES EASE
ICG	APRIL 1997	ALL
MCI	MARCH 1997	ALL
TX COMM SOUTH	NOVEMBER 1996	ORDERING/BUS & RES EASE
SPRINT	FEBRUARY 1997	ORDERING/BUS & RES EASE
USA EXCHANGE	MARCH 1997	ALL

NOTE: A complete (ALL) demonstration includes the following functions and applications:

PRE-ORDER

Datagate
Verigate

MAINTENANCE/ REPAIR

Trouble Administration

ORDER/PROVISIONING

Residential EASE
Business EASE
EDI
LEX
Order Status

BILLING

Billing Inquiry
BILL PLUS*
Usage Extract

ATTACHMENT D

SWBT TRAINING CLASS SCHEDULE OF ELECTRONIC INTERFACES

ATTACHMENT D

April 1997

SWBT TRAINING CLASS SCHEDULE OF ELECTRONIC INTERFACES

CLEC NAME	TRAINIG DATES	FUNCTION/ APPLICATION
AMERICAN TELCO	JUNE 9-13, 1997	RESIDENCE EASE, ORDER STATUS, VERIGATE AND TROUBLE ADMINISTRATION
AT&T	JANUARY 27-31, 1997	RESIDENCE EASE
AT&T	APRIL 14-18, 1997	RESIDENCE EASE, ORDER STATUS, VERIGATE AND TROUBLE ADMINISTRATION
CAPROCK	MAY 12-16, 1997 (tentative)	RESIDENCE EASE
EZ TALK	JANUARY 6-8, 1997	RESIDENCE EASE (beta test 1)
EZ TALK	MAY 5-9, 1997 (tentative)	RESIDENCE EASE
TEXAS COMM SOUTH	JANUARY 22-24, 1997	RESIDENCE EASE (beta test 2)
TEXAS COMM SOUTH	MARCH 19-20, 1997	RESIDENCE EASE (completion)
VALU-LINE OF KANSAS	APRIL 7-11, 1997	RESIDENCE EASE, ORDER STATUS, VERIGATE AND TROUBLE ADMINISTRATION
VALU-LINE OF KANSAS	APRIL 28- MAY 2, 1997 (tentative)	BUSINESS EASE
WESTERN OKLAHOMA LONG DISTANCE	FEBRUARY 24-28, 1997	RESIDENCE EASE
WESTERN OKLAHOMA LONG DISTANCE	MARCH 3-7, 1997	BUSINESS EASE

ATTACHMENT E

SWBT SAMPLE FORECAST LETTER

SWBT Sample Forecast Letter

March, 1997

«M» «FirstName» «LastName»
«Title»
«Company»
«Address1»
«Address2»
«City» «State» «ZipCode»

Dear «M» «LastName»:

As you know, the Telecommunications Act of 1996 ("96 Act") imposes upon Southwestern Bell Telephone Company ("SWBT") an obligation to provide access to unbundled network elements and to offer for resale its retail services. In addition, the Federal Communications Commission has concluded that incumbent local exchange carriers must provide nondiscriminatory access to operations support systems functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing of unbundled network elements and resold services that is at least equivalent to that it provides to itself, its customers, or other carriers. SWBT has worked diligently to meet these requirements and to position itself to honor the contractual obligations contained in its interconnection agreements.

SWBT has set up two centers within its wholesale operations to meet the needs of competitive local exchange carriers ("CLECs"). The Local Service Provider Service Center is the CLECs' single point of contact for purposes of ordering, provisioning, and billing for interconnection, resold services, and unbundled network elements. The Local Service Provider Center serves a similar function for provisioning, turn-up, and acceptance testing of all interconnection facilities and unbundled network elements, and for the receipt of trouble reports and performance of maintenance on all resold plain old telephone services, interconnection facilities, and unbundled network elements. In addition, SWBT has made available to CLECs the same electronic interfaces to its operations support systems ("OSS") that SWBT itself utilizes. Moreover, SWBT has developed several new choices of electronic access to its OSS especially for use by CLECs, beyond those that SWBT and its customers use today.

SWBT is acutely aware that it must process and provision orders from CLECs for resold services and unbundled network elements on a parity basis. In sizing its wholesale operations and OSS to meet the needs of CLECs, SWBT has largely relied upon publicly available information and its own experience in provisioning local exchange services. SWBT has increased its OSS capacity for those interfaces and systems in operation before the '96 Act was passed, and has built-in

Attachment E

enough capacity for the new interfaces and systems to meet its own initial estimates of CLEC order volumes.

However, SWBT wants to ensure that the investment in and size of its wholesale operations and that its OSS capacity best corresponds with its CLEC customers' actual needs. Accordingly, please provide SWBT, as soon as possible, with written estimates of the order volumes that your company expects to submit over the rest of 1997, 1998, and 1999, as well as some other pertinent information.

In addition, as soon as possible, please provide SWBT a written estimate of the quantity of interconnection, resold services, and unbundled network elements that your company expects to order in 1997 through 1999, utilizing the attached worksheet.

Once your company has determined which, if any, SWBT electronic interfaces it will utilize, more detailed forecast information specific to those interfaces will be required from your company in order to fine-tune the preliminary sizing forecasts and to determine the appropriate network connections.

Please provide your company's responses to «Account». If you have any questions concerning this request, you may contact me or simply have your staff contact «Account» at «Number». Thank you in advance for your assistance.

Sincerely yours,

Attachment

cc: «Account»

LOCAL SERVICE PROVIDER FORECAST

LSP Name: _____
Contact: _____
Contact Telephone: _____

Contact: _____
Contact Telephone: _____

[illegible]

LOCAL SERVICE PROVIDER FORECAST

LSP Name: _____
Contact: _____
Contact Telephone: _____

Southwestern Bell Telephone Company
Contact: _____
Contact Telephone: _____

	<i>Arkansas</i>			<i>Kansas</i>			<i>Missouri</i>			<i>Oklahoma</i>			<i>Texas</i>		
	1997	1998	1999	1997	1998	1999	1997	1998	1999	1997	1998	1999	1997	1998	1999
<u>Resale</u>															
<i>Business - Simple</i>															
<i>Business - Complex</i>															
<i>Residence</i>															
<u>Interconnection</u>															
<i>Trunks</i>															
<i>Signaling</i>															
<u>Manual Orders</u>															
<i>Resale</i>															
<i>Unbundled Elements</i>															
<u>Electronic Orders</u>															
<i>Resale</i>															
<i>Unbundled Elements</i>															
<u>Employees with Access</u>															
<i>Ordering</i>															
<i>Maintenance</i>															

TYPE OF ELECTRONIC INTERFACE BY STATE:

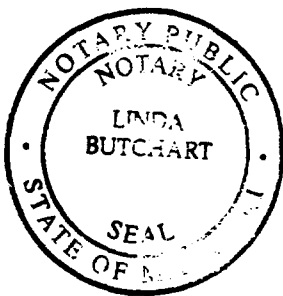
ADDITIONAL COMMENTS:

NOTES: Quantities should reflect anticipated order activity occurring in each quarter/year.

The information contained in this affidavit is true and correct to the best of my knowledge and belief.

Elizabeth A. Ham
Elizabeth A. Ham

Subscribed and sworn to before me this 7th day of April, 1997.



Linda Butchart
NOTARY PUBLIC

LINDA BUTCHART
NOTARY PUBLIC STATE OF MISSOURI
ST. LOUIS COUNTY
MY COMMISSION EXP NOV 19, 1998

My commission expires:

11-19-98